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ABSTRACT

A radiation shield is provided for use on patients undergoing radiotherapy treatment. The shield is made of a suitable radiation absorbing material for preventing the transmission of high energy radiation to the patient's non-treatment areas. The device may further comprise an exterior surface layer for absorbing low energy photons. The shield is sized and shaped to conform to a patient's anatomy and to provide the necessary amount of absorbing material closest to the beam edge while not interfering with the beam. The shield may further comprise an optional cavity located on the interior surface of the shield which may be lined with a soft compressible material for conforming to a patient's unique anatomy. The shield may be further provided with dosimeters mounted on the exterior surface of the leading edge as well as on the interior surface of the shield. The dosimeters may be connected in a systematic manner with the linear accelerator such that the machine could be automatically switched off or warnings given if the patient is receiving too much radiation scatter dose.